

ABSTRACT OF THE DISCLOSURE

A complex wireless service apparatus using wired and wireless communication systems and a method thereof includes, when a call of the complex wireless terminal is not reachable, a call forwarding is automatically tried through another network by making a location of a service user to be registered automatically using the complex wireless terminal, and the service user can make a speech without any disconnection using a hand off between networks for the complex wireless terminal when the user moves from one network to another network during making a call. A home location register stores a database of a mobile communication phone number for the complex wireless terminal, whether an extension is located inside or outside, a public phone number, and a wireless terminal unique number. Moreover, in the case that there is an incoming request for the complex wireless terminal, when the complex wireless terminal is located in the premises, a mobile switching center tries the incoming using the public phone number of the complex wireless terminal and a wireless terminal unique number with reference to the home location register.